QUARTERLY PROGRESS REPORT

SATELLITE SYSTEMS

1 October 1965 to 31 March 1966

I. CORONA PROGRAM

Major Events:

A. 1 October - First major customer design review on J-3 camera was completed. Decision reached to proceed with nodding IMC approach. UTB feasibility demonstrated.

B. 6 October - Final design review held on ISIC. All ISIC work terminated except for cut and splice development.

C. 15 October - Studies begin on J-3 SRV repackaging at General Electric.

D. 21 October - First PG lenses evaluated and accepted at Itek. P.G. instrument conversion begins.

E. 23 November - Preliminary Design Review on GE J-3 repackaging held in Philadelphia.

F. December - A series of accelerometer tests were begun with Payload JX27 (Mission 1028) after a decision was reached that a broader data basis must be developed to reduce the on-orbit environmental unknowns. These tests will provide baseline data for J-1, and increased emphasis on ascent data with the introduction of J-2 (Thorad), and a broad expansion of on-orbit and reentry data for J-3.

G. 13 December - First major DISIC design review held at Fairchild.

H. 1 January 1966 - J-3 camera requirements specification, design control specs, and work statements finalized.

I. 7 January - P.G. designs and procedures finalized.

J. 11 January - Joint CIA/AF CORONA Improvement Program status review held in Los Angeles.

K. 14 January - D/NRO briefed on J-3 SRV proposals. General concurrence received with exception of ESM flight demonstration. Further ESM/PN studies requested.

L. 18 January - Contract negotiations in process with Itek on P.G. and J-3 camera systems.

M. 19 January - First P.G. instruments accepted by Government.

N. 26 January - J-3 recovery programmer and beacon design reviews held in Philadelphia.

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O. 21 February - Exposure control and color conferences held with NRO and NPIC in Washington.

P. 15 March - J-3 exposure control and calibration criteria finalized.

Q. 19 March - Design approval received on J-3 spacecraft work at Lockheed.

R. 22 March - Final review held on Calico computer program.

S. 31 March - J-3 camera interfaces complete.

II. CAMERA

A. During the period October-March major progress has been made on the design and development of the J-3 constant rotator camera. All camera interfaces are now complete and most procurement documents have been released. Contract negotiations with Itek are in process.

B. The J-3 camera system has been enthusiastically received by consumer agencies. The stability afforded by the improved P.G. provisions, and the flexibility inherent in the variable film loading, are capabilities beyond those envisioned at the beginning of the reporting period.

C. The first of the J-1 P.G. cameras was delivered to the Government by Itek in January, and integration work is underway at Lockheed A/P. Although technical problems

25X1

in the lens/collimator area have been experienced w/the J-1 PG design, it is believed these problems will not affect ultimate success of PG concept. First PG flight scheduled for June 66.

D. A mod to the J-1 circuitry was introduced to allow ops of the stellar-index camera in event of master instrument failure.

III. SRV.

Progress on J-3 SRV development limited to interface agreemt completion with camera contractors; design proposals/

Briefing given DNRO on J-3 SRV proposals in January, broad tech guidance rec'd.

A flt demonstration of new squib-activated recovery battery approved on payload J-28 (shceduled for May flight).

On J-1 SRV's mods neces to provide A to B transfer and thrust cone redundancy were incorporated.

IV SPACECRAFT

Go-ahead received from DNRO for design and mock-up work on J-3 system at A/P. Work on interface specs near completion by 31 March 1966.

V. Ops - In support of SOC ops 2 computer programs developed early 1966. Frame no. listing of COMOR targets taken during msn. and assistance to SOC in cutting camera programs for new dual-intermix command system.

Msn 1025	5 Oct 65	recovery	1	10 Oct 65
			2	15 Oct 65
1026	28 Oct 65		1	3 Nov
			2	7 Nov
1027	9 Dec 65		1	10 Dec 65
			2	11 Dec 65
1028	24 Dec 65		1	29 Dec
			2	2 Jan 66
1029	2 Feb 66		1	7 Feb 66
			2	12 Feb 66
1030	9 Mar 66		1	14 Mar 66
			2	19 Mar 66